

# FL 1000

LED light generators  
for use with fibre optic lighting

User manual



## Mounting and installation instructions

Item no.:	0122 0050	FL 1000 B-1 3000 K
	0122 1050	FL 1000 B-2 3000 K
	0122 0053	FL 1000 B-1 3000 K CRI 90+
	0122 1053	FL 1000 B-2 3000 K CRI 90+
	0122 2050	FL 1000 B-1 US 3000 K
	0122 3050	FL 1000 B-2 US 3000 K
	0122 3053	FL 1000 B-2 US 3000 K CRI 90+
	0122 0040	FL 1000 B-1 4000 K
	0122 1040	FL 1000 B-2 4000 K
	0122 2040	FL 1000 B-1 US 4000 K
	0122 3040	FL 1000 B-2 US 4000 K

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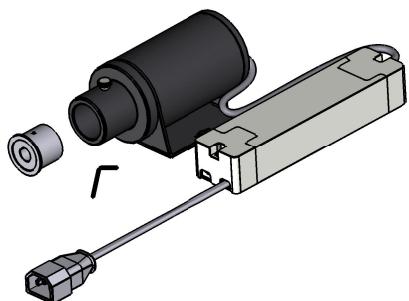
## 1 Introduction

Roblon FL 1000 light generators are designed for use  
indoors  
with glass or PMMA fibre  
in all installation set-ups, including in closed compartments

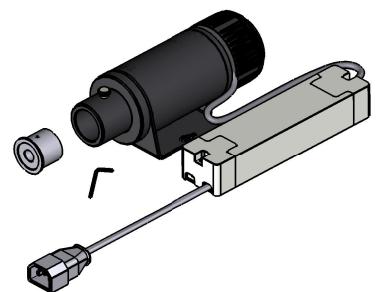
Follow the installation instructions correctly in order to ensure  
safe operation  
enhanced functionality  
extended lifetime for components  
uninterrupted illumination

## 2 Product overview

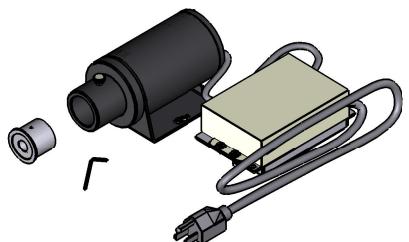
FL 1000 light generator  
Ø28->Ø9 harness adaptor  
Allen key  
Power cord  
User manual



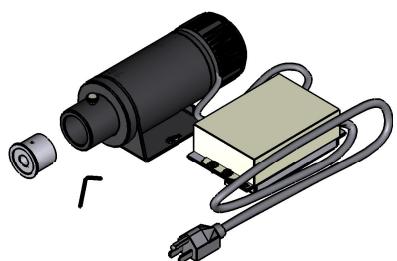
FL 1000 B-1



FL 1000 B-2



FL 1000 B-1 US



FL 1000 B-2 US

### 3 Technical data

Light port	Ø9 or Ø28 mm
Fibre type	PMMA / Glass
Total power consumption @ 350 mA	13 W [B-1]
Total power consumption @ 700 mA	25 W [B-2]
Supply voltage	120-277 V / 50-60 Hz
Applied LED	Lumileds LUXEON S
Light source lifetime	50,000 hours
CCT (nominal)	3,000 K
CRI <sub>8</sub> (Ra) typical value	85
Protection rating	IP20
Driver type	External electronic
Driver lifetime	50,000 hours
Dimmable	Trailing edge 1-10V [US models]
Thermal protection	Automatic decrease
Cooling system	Natural convection [B-1] Synjet [B-2]
Noise level	N/a [B-1] 18 dB(A) [B-2]
Ambient temperature	-20 °C to 45 °C
Material	AlMgSiPb 6262R + POM
Dimensions (L x H x W)	155 x 86 x 70 mm [B-1] 190 x 86 x 70 mm [B-2]
Driver size (L x H x W)	188 x 46 x 32 108 x 77 x 30 [US models]
Weight	0.5 kg [B-1] 0.7 kg [B-2]
Safety	CE, RoHS, WEEE, UL (pending), CB (pending)

## 4 Installation

### 1. For use with Ø9 harness

Mount the Ø28->Ø9 harness adaptor on the common end

Tighten the screw with the Allen key

### 2. Insert the common end fully in the light port

### 3. Tighten the screw on the light port

### 4. 1-10V dimming [US model]

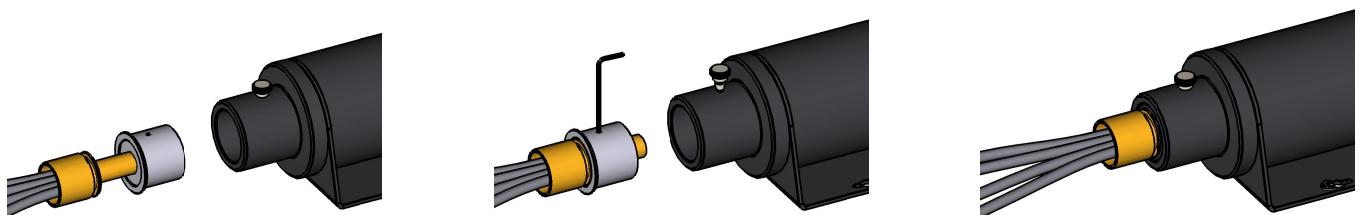
See 'Dimmer selection' guide for FL 1000 models on [www.roblonlighting.com](http://www.roblonlighting.com)  
Choose a compliant dimmer.

Connect dimmer cable red wire to the corresponding (+) terminal in  
accordance with dimmer instructions.

Connect dimmer cable black wire to the corresponding (-) terminal in  
accordance with dimmer instructions.

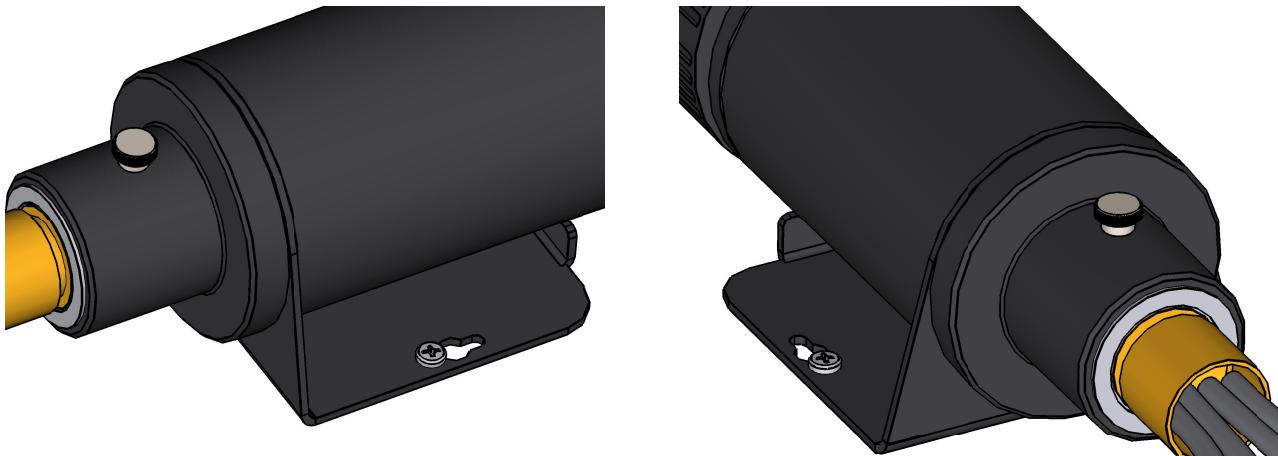
### 5. Ensure all installation and ventilation requirements are met

### 6. Connect the supply cord to the mains



## 5 Surface-mounting

1. Attach to surface using two screws (not supplied) in the baseplate holes



## 6 Installing in closed compartments

### Requirements:

Enough space to allow natural heat transmission through surfaces

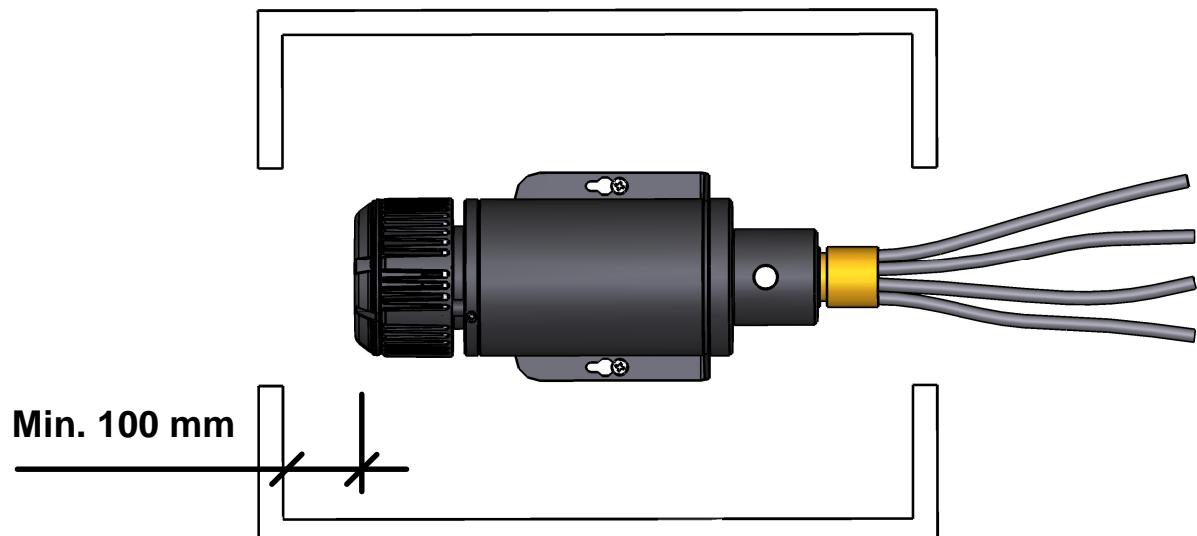
Surfaces should not be insulated

Air volume per light generator minimum  $0.03 \text{ m}^3$

Ventilation holes per light generator with min.  $20 \text{ cm}^2$  air inlet and min.  $20 \text{ cm}^2$  air outlet

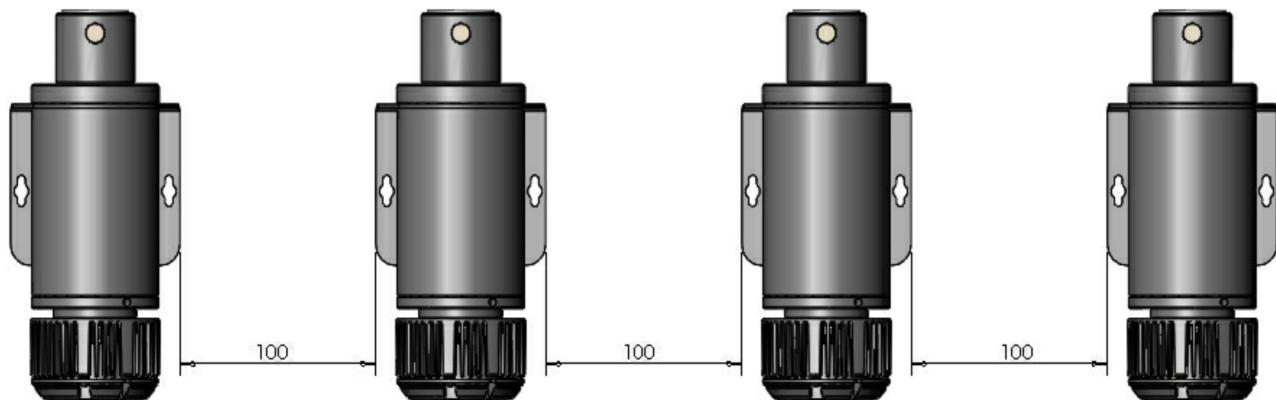
Inlet and outlet ventilation holes opposite each other

Max. ambient temperature  $45^\circ\text{C}$ . (Measuring temperature: see 'Troubleshooting')



## 7 Installing adjacent light generators

Requirement: min. 100 mm distance between adjacent light generators in order to ensure sufficient heat transmission



## 8 Mounting filters

Colour filters (not supplied)

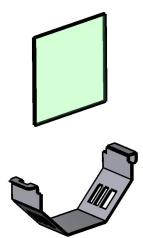
CTC filters (not supplied)

1. Unscrew the plastic front part from the light generator
2. Assemble the filter and bracket
3. Mount the assembled filter in the detached front part
4. Screw the front part on to the light generator

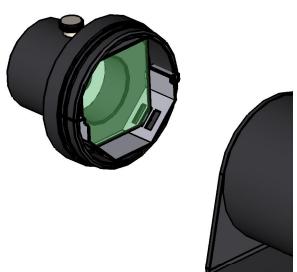
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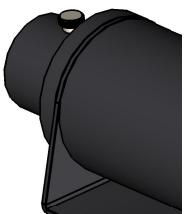
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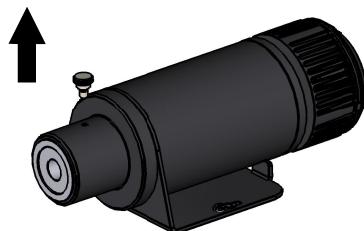
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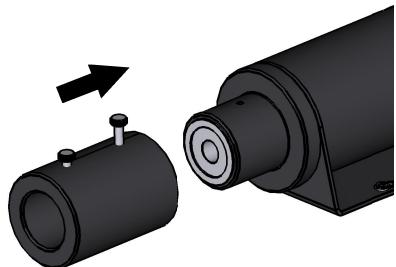
## 9 Mounting diffusion adaptors (Not supplied)

1. Remove the screw
2. Mount the diffusion adaptor
3. Insert and tighten the screw

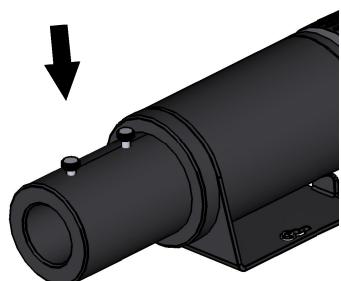
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2



3



## 10 Spare parts

Image	Model designation	Description	Item no.
	LED, FL 1000, module excl. cooling, EN	LED module, no cooling, B-1	0129 4001
	LED, FL 1000, module excl. cooling, US	LED module, no cooling B-1 US	0129 4003
	LED, FL 1000, module incl. cooling, EN	LED module, with cooling B-2	0129 4000
	LED, FL 1000, module incl. cooling, US	LED module, with cooling B-2 US	0129 4002
	Cooler SynJet	SynJet Z Flow 65	0129 2000
	Philips 25W CC 220-240 V	Driver	0129 3000
	Philips 35W CC 120-277 V	Driver US	0129 3001

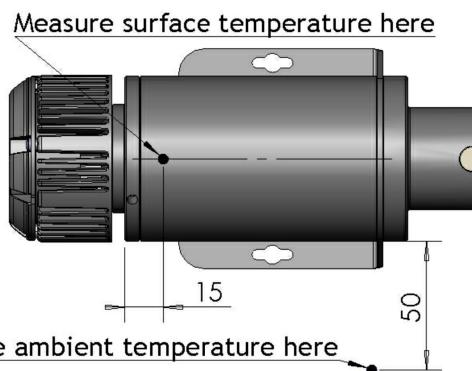
## 11 Accessories

Image	Model designation	Description	Item no.
	CTC Filter A -500K	CTC filter	0126 1000
	CTC Filter A -900K	CTC filter	0126 1002
	CTC Filter A -1200K	CTC filter	0126 1001
	Colour Filter, FL 1000, yellow	Yellow colour filter	0126 1004
	Colour Filter, FL 1000, green	Green colour filter	0126 1005
	Colour Filter, FL 1000, blue	Blue colour filter	0126 1006
	Colour Filter, FL 1000, red	Red colour filter	0126 1007
	Diffusion Adaptor	Diffusion Adaptor	0126 1003

Problem	Trace the problem	Solution
No light	Is the power on? Is the power cord connected properly?	Turn the power on Connect the power cord properly
	Is the light generator too hot*?	Check it is installed according to the instructions. Switch generator off. Let it cool for 15 minutes. Try again.
	Is the LED working?	Replace the LED
Cooling system is running, but no light (B-2 and B-2 US)	Is the light generator too hot*?	Check it is installed according to the instructions. Switch generator off. Let it cool for 15 minutes. Try again.
Light switches on and off	Is the light generator too hot*?	Check it is installed according to the instructions. Switch generator off. Let it cool for 15 minutes. Try again.
	Is the cooling system working? (B-2 and B-2 US)	Replace the cooling system
Light output has diminished	Has the light been dimmed via a dimmer switch?	Increase brightness using dimmer switch
	Is the light generator too hot*?	Check it is installed according to the instructions. Switch generator off. Let it cool for 15 minutes. Try again.
	Is the filter dirty?	Clean filter with damp cloth Dry with lint-free cloth
	Is the harness common end dirty?	Clean filter with damp cloth Dry with lint-free cloth

\* Ambient temperature: max. 45°C. Measured 50 mm from light generator.

Surface temperature: max. 73°C. Measured 15 mm from edge on top of light generator when it has been running for min. 1 hour



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